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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Salah Bouzar

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EXAMINER

ALLISON, ANDRAE S

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,606	Applicant(s) BOUZAR, SALAH	
	Examiner ANDRAE S. ALLISON	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 03/10/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-24 and 27-31 is/are rejected.
- 7) ☒ Claim(s) 23-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Claims 14-31 are pending. Applicant's submission filed on March 10, 2009 has been entered.

Claim Rejections – 35 USC section § 103

In response to Applicant's argument on pages 12-13 that Liam does not focus on points outside the route, however, the Examiner disagrees since Liam clearly teaches in his method can be applied in situation where the vehicle is at location other than a roadway such as a shoulder or chevron (see section 2.2.1.4 and Fig 4)

Applicant, argues that Bague does not cure the deficiencies of Liam, however, the Examiner disagrees since Liam did not mention the use of an optoelectronic converter and Bague discloses a method for traffic accident data recording wherein an optoelectronic converter of a real optical image of the scene in column 14, lines 30-31; thus curing the deficiencies of Liam. Therefore, the combination of Liam and Bague clearly meet the limitation of claim 1 as best understood.

Claim Objections

2. Claim 31 is objected to because of the following informalities: The phrase "stationarity of said said target" in line 11, should read "stationarity of said ~~said~~ target" because the word 'said' is repeated. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 16-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recite the limitation, "when the method makes use of a video camera", however, the bounds of the claim are not definite, since the claim as drafted would imply that there are situations when a camera may not be used, which is not the case. Therefore, the claim is indefinite.

Claims 17 and 31 recite the limitation "the process for detecting incident being suitable for being performed by activating said programmable processor member only while a real image of the scene focused on the target is stationary, said stationarity of the scene relative to the target being detected by verifying that at least one point selected on the current real image of said scene, substantially outside said portion of said route, was approximately at the same position on at least one of a set of immediate previous targets", however, it is unclear as to exactly what is being claimed. Also note that the claims do not clearly define each step in the claim nor does it separate the preamble from the rest of the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-21, 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liam (WO 01/33503) in view of Bague (US Patent No.: 6,246,933).

(As best understood) As to independent claim 17, Liam discloses a method of detecting an incident on a portion of route (1) situated in a scene (2) (method for detecting traffic incident, column 1, lines 7-10) when said portion of route is suitable for having objects traveling therealong (detection of vehicle of region of interest (ROI) at traffic sites, column 11, lines 1-7), and when the method makes use of a video camera (3) (1301, see Fig 1) having a target (4) constituting an optoelectronic converter of a real optical image of the scene, said target being controlled by a programmable processor member (6) (image processing unit, see Fig 1), the process for detecting incidents being suitable for being performed by activating said programmable processor member only while the real image (5) of the scene focused on the target (4) is stationary (note that for incident detection for detection of a stop vehicle, the speed of the vehicle is zero, see column 22, lines 25-23 and column 23, lines 1-15), said stationarity of the scene relative to the target being detected by verifying that at least one point selected on the current real image of said scene, substantially outside said portion of said route, was approximately at the same position on at least one of a set of immediate previous targets (note that the method can be applied in situation where the vehicle is at location other than a roadway such as a shoulder or chevron, see section 2.2.1.4 and Fig 4). However, Liam does not expressly disclose an optoelectronic converter of a real optical image of the scene. Bague discloses a method for traffic accident data recording wherein an optoelectronic converter of a real optical image of the scene (see column 14, lines 30-31). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modified the method for detecting a traffic incident of Liam with

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the method for traffic accident data recording for reproducing and reconstructing accident by using traffic information stored in a traffic accident data recorder (column 1, lines 7-14) so that a traffic incident could be reconstructed using real historic data instead of post-accident or estimated data (column 6, lines 5-8).

(As best understood) As to independent claim 31, this claim differs from claim 17 only in that claim 31 is apparatus whereas, claim 17 is method and the limitations a video camera with an optical axis controllable in azimuth, elevation and focal distance and a computer process to detect traffic incidents are additively recited. Bague discloses a computer (21, see Fig 2) process to detect traffic incidents are additively recited. However, Liam in view of Bague does not expressly disclose a video camera with an optical axis controllable in azimuth, elevation and focal distance. However, it would have been obvious to include a video camera with an optical axis controllable in azimuth, elevation and focal distance in the system for detecting traffic incident of Liam as modified by Bague to detect traffic incident at almost any angle or direction and at the same time maintaining good focus.

As to claim 15-16, all the limitations are discussed above except: wherein the real image of the scene begins to move relative to the target occurs upon the beginning of a zooming in function or a zooming out function of the real image and wherein the end of the movement of the real image of the scene relative to the target occurs upon an end of a zooming in function or a zooming out function of the real image. However, it

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would have obvious for one skilled in the art to have modified Liam as modified by Bague to wherein the end and beginning of the scene is a function of the zoom so that the camera would be in optimal position and have the proper focus to capture a scene and to quickly and easily determine if there an incident has occurred.

As to claim 18, Liam teaches the method, wherein the programmable processor member is deactivated as soon as the stationarity of the scene relative to the target is detected as ending, and reactivated, in order to implement the process for detecting an incident, as soon as said stationarity of the scene relative to the target is detected as beginning. (note that the vehicle detection window detect the moving vehicle and if the vehicle is not present in the preceding and current frame the vehicle detection window will be in an idle state, see column 21, lines 9-15, also see column 23, lines 1-15, where a stopped vehicle is detected indication a traffic incident).

As to claim 19, Liam teaches the method, characterized in that the beginning and the end of movement of the real image of the scene relative to the target are detected: by determining at least one first image point of said real image of the scene corresponding to a fixed point of said scene; by generating a first command signal when said first image point is subjected to a change of position on said target; and in controlling said programmable processor member as a function of said first command signal (see column 19, lines 14-30, where textual measurement for the region of interest is computed using matrix elements).

As to claim 20, Liam teaches the method, characterized in that the beginning and the end of movement of the real image of the scene relative to the target are detected: by determining at least second and third image points of said real image of the scene corresponding respectively to two stationary points of said scene; by generating a second command signal when the distance between said second and third image points changes; and by controlling said programmable processor member as a function of the second command signal (see column 19, lines 14-30, where textual measurement for the region of interest is computed using matrix elements).

As to claim 21, Liam teaches the method, characterized in that the beginning and the end of movement of the real image of the scene relative to the target are detected: by determining at least fourth and fifth image points of said real image of the scene which correspond respectively to two stationary points of said scene; by generating a third command signal when the distance between the fourth and fifth image points varies and when at least one of the fourth and fifth image points is subject to a change of position on said target; and by controlling said programmable processor member as a function of the third command signal (see column 19, lines 14-30, where textual measurement for the region of interest is computed using matrix elements).

As to claim 27, Liam teaches the method characterized by the fact that the beginning and the end of movement of the real image of the scene relative to the target

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are detected: by determining a plurality of image points of said real image of the scene corresponding to a plurality of points that are stationary at the beginning of movement of the real image; by generating a fourth command signal when a determined number of said plurality of image points have become stationary again at the end of movement of the real image; and by controlling said programmable processor member as a function of said fourth command signal (see column 19, lines 14-30, where textual measurement for the region of interest is computed using matrix elements).

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6. Claims 22 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liam (PCT/SG99/00115) in view of Bague (US Patent No.: 6,246,933) further in view of Michalopoulos et al (Patent No.: US 4,847,772).

As to claim 22, neither Liam or Bague teach the method, characterized by the fact that it consists in subdividing said target into a plurality of photosensitive points, said photosensitive points being suitable for delivering signals as a function of the quantity of radiation received by their photosensitive surfaces. Michalopoulos discloses a vehicle detection method (column 1, lines 8-10) characterized by the fact that it consists in subdividing said target into a plurality of photosensitive points, said photosensitive points being suitable for delivering signals as a function of the quantity of radiation received by their photosensitive surfaces (see Fig 3, where the image is divided into blocks, also see column 2, lines 55-65). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modified the method for detecting a traffic incident of Liam as modified by Bague with the vehicle detection

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method of Michalopoulos to determine vehicle presence, passage, measure various traffic parameters, thus facilitating traffic surveillance (column 1, lines 10-17) by processing selection portion of the successive frames (column 4, lines 30-35).

As to claims 28-30, note the discussion of claim 22 above.

Allowable Subject Matter

7. Claims 23-26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDRAE S. ALLISON whose telephone number is (571)270-1052. The examiner can normally be reached on Monday-Friday, 8:00 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikram Bali can be reached on (571) 272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrae S Allison/

May 18, 2009

/Vikkram Bali/

Supervisory Patent Examiner, Art Unit 2624